

## **VEHICLE OCCUPANT SENSING SYSTEM AND METHOD OF ELECTRICALLY ATTACHING A SENSOR TO AN ELECTRICAL CIRCUIT**

### **ABSTRACT OF THE DISCLOSURE**

A vehicle occupant sensing system for detecting a condition of a vehicle seat. The system includes a circuit carrier, an electric circuit with a plurality of leads, and at least one sensor that has a plurality of terminals. Also, the system includes a plurality of conductive connectors associated with the corresponding terminals and leads. The connectors each include a body disposed for electrical communication with the associated terminal and include at least one deformable blade. The blade extends into the circuit carrier and into electrical communication with the associated lead of the circuit, thereby mechanically attaching the conductive connector to the carrier while providing electrical communication between the sensor and the circuit. Also included is a method of manufacturing the same. By piercing the carrier and the circuit, the blade establishes a more robust mechanical and electrical connection for the sensor, thereby increasing the operating life of the system.